



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,482	11/26/2001	Lorthar Diehl	10191/1897	2543
26646	7590	01/30/2004	EXAMINER OLSEN, KAJ K	
KENYON & KENYON ONE BROADWAY NEW YORK, NY 10004			ART UNIT 1753	PAPER NUMBER

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/913,482

Applicant(s)

DIEHL, LORTHAR

Examiner

Kaj Olsen

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-32, 44-47 and 50-52 is/are allowed.
- 6) ☒ Claim(s) 33, 43, 48 and 49 is/are rejected.
- 7) ☒ Claim(s) 34-42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 48 and 49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. New claim 48 recites that the metallic component of the at least one electrode is different from the metallic component of the lead. The examiner cannot find any support for this. The only metal that is disclosed for both the electrode and the electrode lead is platinum. Clarification as to how the originally filed disclosure supports this is requested.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 33 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al (USP 4,668,375).

Art Unit: 1753

5. These claims remain rejected over Kato for the reasons set forth in the previous office action.

Response to Arguments

6. Applicant's arguments filed 11-21-2003 have been fully considered and are partially persuasive. In particular, the applicant's arguments concerning the previous rejection under 112 first paragraph were persuasive and this rejection is being withdrawn. Hence claims 44 and 50-52 are hereby allowed. The examiner has also withdrawn the rejection of claim 34 (which 35-39 depend from) because Kato does not appear to disclose nor render obvious the set forth ceramic component of the electrode lead being different from the ceramic component of the electrode. The examiner is also withdrawing the rejection of claim 41 (which 42 depends from) because it is not obvious to this examiner why one possessing ordinary skill in the art would modify Kato to arrive at the claimed invention of claim 41. Finally, the arguments concerning the rejection where element 31 is construed as being an electrode was also persuasive and this examiner will withdrawn that rejection. However, applicant's other arguments with respect to the rejections of claims 33 and 43 were not persuasive as discussed below.

7. With respect to the rejection of claims 33 and 43 over Kato, applicant urges that this reference does not teach an electrode lead 18 having a lower resistance than the electrode itself based on Kato, col. 6, lines 23-30. It is unclear what about this passage has given the applicant the impression that this somehow teaches away from the claimed invention. The element that Kato is calling the lead 13 is being read as being part of the electrode. The passage appears to be referring to the fact that Kato has improved the adhesion by using terminals 31 and 32 while

Art Unit: 1753

maintaining the same resistance for elements 13 and 15. That is not the same thing as saying that varying the composition would not vary the conductivity. In fact on that point Kato is clear that varying the metal content of 18, 13, or 11 would vary the conductivity (col. 8, lines 48-57). This is common sense. Zirconia is not appreciably electrically conductive so clearly an electrode being made with 40% zirconia (the remainder being metal) would have less electrical conductivity than a lead 18 made with only 10% zirconia.

8. Applicant also suggests that the Office is using contradictory interpretation of the claim language. As noted above, the examiner is withdrawing the rejections where element 11 is the "lead" and element 31 is the "electrode". These elements clearly do not read on "lead" or "electrode" respectively giving the claim language its broadest reasonable interpretation. However, it is well within the metes and bounds of the claims to read elements 11 and 13 collectively as the electrode and element 18 as the electrode lead. This is because these elements 11 and 13 are the same material and are functioning in combination as an electrode and element 18 is clearly functioning as an electrode lead. In fact, the examiner would point out that the instant invention extends the "electrode" out beyond the portion of the metal coating that is functioning as the electrode (see element 52 in fig. 3 and 4), giving credence to the examiner interpretation of element 13 as being part of the electrode. The applicant cannot fall back on the fact that Kato refers to element 13 as being a lead when the applicant's own disclosure runs counter to such a narrow interpretation of element 13.

9. Applicant also urges that the relative metal content of electrode in comparison with the electrode lead is not discussed in Kato. This is incorrect. Col. 5, lines 24-46 of Kato states that the electrode has a composition of 60% metal and 40% zirconia while the lead 18 has 90% metal

Art Unit: 1753

with 10% zirconia (element 11 is part of the material utilized to form element 13 and would have the same composition). This is conjunction with Kato's clear assertion that varying the metal content of the various materials will change their conductivity (col. 8, lines 48-57) indicates that Kato anticipates the claimed subject matter.

Allowable Subject Matter

10. Claims 22-32, 44-47 and 50-52 are allowed.
11. Claims 34-42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1753

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (571) 272-1344. The examiner can normally be reached on Monday through Thursday from 7:00 AM-4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Mr. Nam Nguyen, can be reached at (571) 272-1342.

When filing a fax in Group 1700, please indicate in the header "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of this application. This will expedite processing of your papers. The fax number for all official communications is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (571) 272-1300.

A handwritten signature in black ink, appearing to read 'Kaj Olsen', with a stylized flourish extending to the right.

Kaj K. Olsen
Primary Examiner
AU 1753
January 23, 2004